

EXHIBIT A

NJ TRANSIT PTC PROJECT #10-099X



ALSTOM

#7011204

CONTRACT DOCUMENTS



100 Broadway • New York, NY 10005 • (212) 266-8300 • Fax: (212) 266-8536 • www.parsons.com

August 12, 2011

Alstom Signaling, Inc.
1025 John Street
West Henrietta, NY 14586

Attn: Robert Coriale
Alstom Project Manager

Re: NJ TRANSIT Contract No. 10-099X
Design, Furnishing, Construction, Testing and Commissioning of the ASES II Positive Train Control System (ASES II PTC)
Notice of Contract Award & Notice to Proceed

Dear Mr. Coriale

Enclosed please find Alstom's subcontract for the subject project, with all referenced attachments. Please execute two copies of the subcontract by a duly authorized officer of your company with an original corporate seal affixed to each copy. Please return both original copies to the undersigned along with the Parent Company Guarantee and all required proof of insurance as described in GC 12 of the subcontract. Parsons will return a fully executed copy of the subcontract for your records.

Parsons is pleased to provide this Notice of Award in the amount of \$60,476,090.55 for the Project Phases and Options as described in Attachment D of your subcontract. Additionally, Alstom is hereby given Notice to Proceed with Phase I of the work, effective the date of this letter. Please proceed with all necessary urgency to mobilize your project team and support the initial project deliverables required by NJ Transit. Parsons will notify you shortly of our planned project kickoff activities, in which your participation will be required.

Parsons looks forward to a successful project and thanks you in advance for your attention to that actions described herein. Should you have any questions, do not hesitate to contact the undersigned at (212) 266-8532.

Sincerely,

Brian Finn
Project Manger

Encl: 1) Alstom Subcontract dated July 25, 2011
2) Prime Contract dated August 11, 2011
3) Alstom Scope of Work dated July 25, 2011
4) Alstom Technical Proposal dated July 25, 2011
5) Parsons Safety Plan Template

CC: Nick Larocco, Project Executive
Chad Carter, Deputy Project Manager



August 12, 2011

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SUBCONTRACTOR PROFESSIONAL SERVICES AGREEMENT

This agreement, together with the general and special terms and conditions and other attachments that are incorporated herein, constitutes an agreement (the "Agreement") between Parsons Transportation Group Inc. (the "Contractor"), an Illinois Corporation doing business at 100 M Street, SE, Washington, DC 20003 and Alstom Signaling Inc. (the "Subcontractor") a corporation under the laws of the State of Delaware doing business at 1025 John Street, West Henrietta, NY 14586 for professional engineering and design services required by New Jersey Transit Corporation (the "Client") for Design, Furnish, Construct, Test and Commission the ASES II Positive Train Control System, Sealed Bid No. 10-099X (the "Project"). The services being furnished by the Contractor to the Client under the Contractor's contract with the Client for the Project ("Prime Contract"), more fully described therein, consist generally of the supply and commissioning of necessary onboard, wayside, central office and communications technology in order to provide a Positive Train Control system compliant with the Rail Safety Improvement Act of 2008. Unless otherwise extended, this system shall be commissioned and safety certified on all applicable Client infrastructure by December 15, 2015.

Subcontractor will perform a portion of the work as required by the Prime Contract as a Subcontractor to Contractor under the terms of this Agreement and Subcontractor assumes the obligations and liabilities that Contractor has to the Client as provided for in the Prime Contract with respect to Subcontractor's portion of the work.

Subcontractor agrees to the General Terms and Conditions of this Agreement as well as the Scope of Services (Attachment "A"), Schedule (Attachment "B"), Staffing Plan (Attachment "C"), Compensation (Attachment "D"), Special Provisions (Attachment "E"), Prime Contract (Attachment "F") and Project Safety Plan (Attachment "G").

IN WITNESS THEREOF, the Contractor and the Subcontractor hereby execute this Agreement, and said Agreement shall come into force and effect upon execution by both parties.

CONTRACTOR

PARSONS TRANSPORTATION GROUP INC.

By Philip T. Barrett
 Signature
Philip T. BARRETT
 Typed Name
SR. PROCUREMENT MANAGER
 Officer's Title
8-29-11
 Date

SUBCONTRACTOR

Alstom Signaling Inc.

Taxpayer I.D. No. 52-1711877

By Ian de Souza
 Signature
Ian de Souza
 Typed Name
President & CEO
 Officer's Title
August 18, 2011
 Date

GENERAL CONDITIONS

GC 1. SUBCONTRACTOR'S SERVICES - Under the terms and conditions of this Agreement and the Prime Contract, Subcontractor shall perform and be responsible for a portion of the Contractor's Services for the Project. The Subcontractor Services (The Services) to the Contractor shall consist of those tasks for the Project described in Attachment "A" (Scope of Services) which is attached and made part of this Agreement. The Subcontractor shall perform the Services in a manner that is coordinated with the Contractor's activities on the Project and in accordance with the terms and conditions of this Agreement and the Prime Contract. The Subcontractor and the individual executing this Agreement on behalf of the Subcontractor each represent that they have the full right, power and authority to execute this Agreement.

GC 2. SCHEDULE - The Services under this Agreement shall commence upon receipt of written notice to proceed. Services under this Agreement shall be completed no later than the date shown in Attachment "B" (Schedule). Services shall be performed in accordance with the Schedule for the Project as determined by the Contractor and the Client and any revision to that Schedule that may be subsequently issued. Subcontractor's compliance with the Schedule is of the essence and is a material provision of this Agreement. Revisions to the Schedule, including any delay to the notice to proceed, that result in increased or decreased cost to the Subcontractor are subject to the provisions of GC 5 (Changes).

GC 3. PERSONNEL - The Subcontractor agrees that the key staff to perform services required under this Agreement shall be as specifically named or as described by position in Attachment "C" (Staffing Plan). As its Project Representative under this Agreement, Subcontractor designates the specific individual identified in Attachment "C". Substitution of staff, including the Project Representative, may only be made for good cause and with personnel having capabilities reasonably similar to the named staff, but only with prior written approval of Contractor. In the event Contractor objects to any staff member of the Subcontractor, the Subcontractor shall promptly replace such person to Contractor's satisfaction. As its representative under this Agreement, the Contractor shall designate a Project Manager who shall provide overall direction on this Project. The Contractor's Project Manager may delegate areas of responsibility to others. In such event, the Subcontractor shall also take instructions from such additional representatives.

GC 4. COMPENSATION - Subject to additions and deductions as herein provided, the Contractor shall pay the Subcontractor on the basis of and in the amount(s) set forth in Attachment "D" Compensation (the "Agreement Price"). The Subcontractor shall submit invoices periodically as required by Contractor in sufficient time for the Contractor to include them with the Contractor's invoices to Client, but not later than the tenth day of each month. The Subcontractor's invoices shall also be in the form required by the Client or the Contractor. Upon approval by the Contractor and after any adjustment reasonably required by the Contractor, the Subcontractor's invoice will be included in the Contractor's invoice to the Client. Prompt payment shall be made to the Subcontractor upon and subject to the Contractor's receipt of payment from the Client for those services rendered by the Subcontractor in conformance with requirements of this Agreement, less any amount retained pursuant to this Agreement and/or the Prime Contract.

GC 5. CHANGES - This Agreement and the scope of the Subcontractor's Services may be revised, added to or reduced only by the Contractor's written order or direction. In the event Client orders or directs any change or alteration in the Subcontractor's services, Contractor will promptly notify Subcontractor of such order or direction and Subcontractor shall promptly comply with the order or direction of Client.

In the event Subcontractor receives a direction or order that will increase Subcontractor's cost or cause a delay in the performance of the Services, Subcontractor shall notify the Contractor of the increased cost or schedule impact in a timely manner. Subcontractor shall comply with the direction or order taking reasonable measures to minimize cost and schedule impact until Contractor confirms or rescinds the order.

Unless Contractor rescinds the order, Subcontractor shall promptly submit an estimate of the cost and schedule impact of the order. Contractor and Subcontractor shall meet and agree on the cost and schedule impact and Contractor shall issue a written change order amending the terms of this Agreement. In the event Contractor and Subcontractor do not agree on the cost and schedule impact of the order, Contractor may issue a unilateral change order stating the additional compensation and time due to the order. Subcontractor may dispute the unilateral change order as provided by GC 15 (Governing Laws and Disputes). Subcontractor shall continue performance of the Services, including Services subject to dispute during the time necessary to resolve the dispute.

GC 6. SAFETY AND HEALTH REQUIREMENTS - Subcontractor will take all precautions in the performance of the Services under this Agreement to protect the safety and health of Subcontractor's employees, other persons on the Work Site and members of the general public.

Subcontractor shall comply with Contractor's Project Safety Plan (PSP), if included in this agreement as Attachment "G." If Subcontractor fails to comply with the safety requirements set forth in this Agreement or any other applicable safety regulations, Contractor may at its discretion, without prejudice to any other legal and contractual rights, take reasonable actions to secure a safe environment, including but not limited to suspending or terminating this Agreement. Subcontractor will not be entitled to an extension of time or to compensation by reason of, or in connection with, a work stoppage arising from an unsafe condition or safety infraction caused by Subcontractor. Subcontractor shall ensure that its employees and sub-tier subcontractors are aware of, trained in and follow the PSP.

Subcontractor warrants that it has reviewed the safety requirements of the Prime Contract (Attachment "F") and will comply with these requirements.

Prior to start of work activity, Subcontractor shall submit to Contractor a Site Specific Safety Plan applicable to Subcontractor's Scope of Services that identifies the risks and hazards of such work. Subcontractor's Safety Plan also shall describe the control measures that Subcontractor will implement to mitigate the risks and hazards associated with its work. Subcontractor shall ensure that its employees and employees of sub-tier subcontractors are aware of and trained in the Subcontractor's Site-Specific Safety Plan. Subcontractor shall be solely responsible for the safety of its personnel.

GC 7. PROJECT DATA - The Subcontractor shall be responsible for obtaining all data and information necessary for the proper and complete execution of the Services. In the event the Subcontractor needs any such data or information from the Client, the Subcontractor's request shall be in writing and presented to Contractor who will forward the request to the Client.

GC 8. RECORDS - The Subcontractor shall maintain complete records of all hours billed and direct costs incurred under this Agreement so as to accurately reflect the Services performed and basis for compensation and reimbursement under this Agreement. The authorized representatives of the Contractor and the Client shall have the right to inspect, audit and reproduce all records, books, documents, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data, including accounting procedures and practices relating to this Agreement and the Services rendered thereunder at all reasonable times during normal business hours. The Subcontractor shall preserve all such records for a period of three years after the date of final payment for Services or such longer time as may be specified in the Prime Contract.

GC 9. SUCCESSORS AND ASSIGNS - Neither party shall assign its rights or delegate its duties under this Agreement, including subcontracting any part of the Services to a third party, without the prior written approval of the other party, which approval shall not be unreasonably withheld or delayed.

GC 10. INDEPENDENT CONTRACTOR - The Subcontractor is an independent contractor under this Agreement with respect to performing the Services for the Contractor. The employees furnished by the Subcontractor to perform the Services shall be and are the Subcontractor's employees exclusively, and shall be paid by the Subcontractor for all services in connection with this Agreement. The Subcontractor shall be responsible for all payments, obligations and reports covering Social Security, Unemployment Insurance, Workers Compensation, Income Tax and other reports and deductions required by any applicable state, local or federal law for its employees.

GC 11. RIGHT OF WORK PRODUCT - Except as provided herein, the Contractor shall have no rights to any of Subcontractor's intellectual property, including but not limited to designs, specifications, notes, drawings, data, software and the like, used or employed in connection with this Agreement. All intellectual property rights of the Client relating to the Subcontractor's Services under this Agreement shall be governed by the terms of the Prime Contract.

A. The Contractor shall have the right to use, duplicate, or disclose technical data described in Article 70.3 of the Prime Contract to the extent reasonably necessary for the performance of its duties under the Prime Contract. Subcontractor shall not be responsible for the results or consequences of any use other than the intended use as described in this Agreement.

B. If this Agreement is terminated for cause, as described in GC 14 herein, Contractor shall have the right to use the technical data to be provided by Subcontractor as described in Prime Contract Article 70.4 to the extent necessary for the Contractor to perform its obligations under the Prime Contract. Subcontractor shall deliver such information to Contractor within thirty (30) days after it is requested by Contractor.

C. If Subcontractor provides information or data to Contractor and Client that is subject to rights of a third party, Subcontractor represents that Subcontractor has sufficient rights so that the

information and data can be used for its intended purpose without infringing on any right in the information and data held by a third party and hereby transfers the rights held by Subcontractor to Contractor and Client.

GC 12. INSURANCE - The Subcontractor shall take out and maintain at its sole cost and expense the insurance coverage for this Agreement as described in Special Provision SP 1 (Insurance Requirements). All such coverage shall be in a form and with insurers acceptable to the Contractor and the Client.

The Subcontractor shall furnish to the Contractor acceptable certificates of insurance evidencing the required coverage specified above prior to beginning work as a condition precedent before any payments (progress or final) shall be due. All liability insurance policies written on a claims-made basis shall be maintained for a minimum of two (2) years following completion of all services under this Agreement.

All policies, with the exception of Workers Compensation Insurance shall be endorsed to include the Contractor and the Client, and their respective officers, directors, agents and employees as additional insured, but only to the extent of Subcontractor's negligence occurring in the performance of this Agreement. All policies required by this Agreement shall be endorsed to waive the underwriter and insurer rights of subrogation against the Contractor. The insurance required by this Agreement shall be primary and non-contributing to any insurance provided by the Contractor or the Client unless otherwise provided in the Special Provisions.

GC 13. INDEMNIFICATION The Subcontractor shall be responsible for and shall defend, indemnify and hold the Contractor and the Client free and harmless from any and all claims, demands, causes of action, loss, cost, damage and expenses, including reasonable attorney's fees, expert and Contractor's fees, for claims of third-parties, including but not limited to claims for bodily injury, including death, and property damage, to the extent caused by the negligence of the Subcontractor or by a defect in the products furnished by Subcontractor under this Agreement.

GC 14. TERMINATION AND SUSPENSION -

The Contractor may terminate this Agreement for cause upon 10 days written notice to Subcontractor.

For the purpose of this General Condition, "cause" shall include, but shall not be limited to, (i) a material breach of this Agreement which remains uncorrected or a plan to correct has not been furnished for a period of fifteen (15) days from the date that the Contractor gives the Subcontractor notice of such breach; or (ii) the insolvency of the Subcontractor, the filing of a voluntary or involuntary petition of bankruptcy by the Subcontractor which is not dismissed within sixty (60) days of filing, the substantial impairment of the business of the Subcontractor as a result of its credit problems, or the assignment of substantially all of the assets of the Subcontractor for the benefit of its creditors.

If Contractor terminates this Agreement for cause, the Subcontractor shall be fully responsible for all costs to complete the Services in excess of those costs Contractor would have incurred had the Agreement not been terminated. Contractor may complete the Services or enter into an agreement with others for completion of the Services. After the Services are complete Contractor will determine

the costs of all completed Services and notify the Subcontractor of the amount, if any, that is to be paid or is owed. If the total cost to perform the Services, including amounts paid to Subcontractor plus the cost to complete the terminated Services is greater than the amount Contractor would have incurred had the Agreement not been terminated, Subcontractor shall promptly pay the excess amount to Contractor. Subcontractor shall not be entitled to payment of any amount, which exceeds the total of all costs and fees described above.

Contractor may terminate this Agreement at the Client's direction or upon termination of the Prime Contract, in which event the Subcontractor shall be entitled to compensation as provided for in the Prime Contract but only to the extent that the Contractor is compensated by the Client for the Subcontractor's Services. In no event, however, shall the total amount paid to the Subcontractor exceed the amount set out in Attachment "D" (Compensation).

The Contractor may suspend the Subcontractor's Services for such period of time as the Contractor deems necessary. If such suspension is for the Contractor's convenience, the Contractor will issue a change order in accordance with GC 5 (Changes). If such suspension is as a result of a suspension under the Prime Contract, the Subcontractor will be compensated, if at all, pursuant to the terms of the Prime Contract.

GC 15. GOVERNING LAWS AND DISPUTES - All claims, disputes and matters in question arising out of or relating to this Agreement or the breach thereof shall be resolved in the following manner:

- A. This Agreement shall be governed by and construed in accordance with the laws of the State where the Project will be constructed without reference to its conflicts of laws provisions.
- B. In the event of a dispute where the potential liability of either party is equal to or exceeds the amount of One Million Dollars (\$1,000,000) either party may bring an action in a court of competent jurisdiction where the Project will be constructed or where the Contractor's services are provided. In any such litigation, the parties agree to waive their rights to a jury trial on all issues.
- C. In the event of a dispute where the potential liability of each party is less than One Million Dollars (\$1,000,000) the matter shall be resolved by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association then in effect subject to the following conditions: Arbitration to be held in the state where the Project will be constructed or as otherwise mutually agreed by the Parties.
- D. There will be a single arbitrator appointed by the American Arbitration Association from its National Panel in accordance with its normal procedures for selection of arbitrators. The parties also agree that the arbitrator shall be considered neutral and not party arbitrators regardless of how selected or by whom appointed.
 - 1. The arbitrator will issue a detailed written decision setting forth the legal and factual basis of the decision. If there is more than one issue upon which a party's claim is based, the decision will separately address each issue.

2. The parties will produce documents as if the arbitration is governed by the Federal Rules of Civil Procedure.
 3. Any question whether a dispute must be decided in arbitration shall be determined by a court of competent jurisdiction and not by arbitration.
 4. The agreement to arbitrate does not apply to any claim of contribution or indemnity based upon a claim or action by a person who does not consent to become a party to arbitration with the parties.
 5. The award rendered by the arbitrator shall be final and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction.
 6. The parties agree to consolidate any arbitration initiated in accordance with this provision with any arbitration involving either party and arising out of a common question of fact or law.
 7. Notwithstanding any provision(s) contained in this arbitration agreement between Contractor and the Subcontractor and any rule(s) of the American Arbitration Association which may provide or be construed to the contrary, the parties hereto agree that the arbitrator(s) shall have no authority to determine and dispose of any claim and counterclaim, or any part(s) thereof, pursuant to motions(s) for summary adjudication or any other such dispositive motion procedure.
- E. In the event that the Contractor determines that all or any portion of any claim, dispute or other matter in question between itself and the Subcontractor may be the responsibility in whole or in part of a person or entity not a party to this Agreement, Subcontractor may, at the Contractor's sole discretion, be included within the Contractor's dispute resolution proceeding with that other person or entity. In the event of such inclusion, the Contractor's liability to the Subcontractor will be limited to the amount recovered on behalf of the Subcontractor. The Subcontractor shall be responsible for its share of the costs of any such proceeding. Resolution of the Subcontractor's claim will be stayed pending completion of the separate proceeding. Any arbitration agreement shall be governed by the Federal Arbitration Act.
- F. Notwithstanding any other requirement of this GC 15, Subcontractor agrees to participate in disputes proceedings and comply with the disputes provisions of the Prime Contract if, and to the extent, the Prime Contract includes terms applicable to the resolution of the dispute.

GC 16. STANDARD OF CARE - The Subcontractor represents that the Services performed by the Subcontractor under this Agreement shall be conducted in a manner consistent with that level of care and skill ordinarily exercised by or under the direction of members of the Subcontractor's profession.

GC 17. ENTIRE AGREEMENT - This Agreement, including all attachments and documents incorporated herein and made applicable by reference, constitutes the complete and exclusive statement of the terms and conditions of the Agreement between the Contractor and the Subcontractor and supersedes all prior representations, understandings and communications. The invalidity in whole or in part of any terms or conditions of this Agreement shall not affect the validity of other terms or

conditions. The failure of the Contractor to insist upon the Subcontractor's performance of any terms and conditions of this Agreement shall not be construed as a waiver or relinquishment of Contractor's right to such performance, nor shall such failure be construed as a waiver of future performance of such terms and conditions, and the Subcontractor's obligation in respect thereto shall continue in full force and effect.

GC 18. PRIME CONTRACT TERMS AND CONDITIONS - The Prime Contract is incorporated in this Agreement as Attachment "F" and the Subcontractor will be bound by the Prime Contract terms and conditions insofar as they relate in any way, directly or indirectly, to the Services covered by this Agreement. The Subcontractor agrees to be bound to the Contractor in the same manner and extent that the Contractor is bound to the Client under the Prime Contract, to the extent of the Services provided for in this Agreement and that where, in the Prime Contract, reference is made to Contractor, and the work or specifications pertains to Subcontractor's Services as outlined in Attachment "A" (Scope of Services) then such work or specifications shall be interpreted to apply to the Subcontractor instead of Contractor and will be included in the Scope of Services. In the event of conflict between a provision of the Prime Contract and this Agreement, the term of this Agreement will prevail.

GC 19. AFFIRMATIVE ACTION AND SUBCONTRACTING PLANS - The Subcontractor shall also comply with all federal, state, and local laws, rules, ordinances and decisions, and executive orders dealing with affirmative action and nondiscrimination in employment and with subcontracting to disadvantaged, minority owned, and woman owned businesses. In addition, the Subcontractor shall comply with all policies, plans and procedures the Client may have with respect to these matters. The Subcontractor is required to complete all forms and reports required by law and the Client.

GC 20. STATUS OF EMPLOYEES - With respect to establishing the status of its employees to legally work in the United States, Subcontractor warrants that it is in compliance with (i) the Immigration Reform and Control Act of 1986 (the "Act") as well as with all regulations implementing the Act and (ii) any State laws and regulations relevant to such status. Subcontractor is aware of the federal government E-Verify program operated by the Department of Homeland Security and shall participate in that program if such participation is required by applicable Federal or State law or by the Prime Contract.

GC 21. FINAL RELEASE AND FINAL PAYMENT - As a condition precedent to Contractor's payments under this Agreement, the Subcontractor shall, at the request of the Contractor, furnish lien releases satisfactory to the Contractor and the Client. The Contractor may at any time pay and discharge liens, claims and encumbrances filed by the Subcontractor's subcontractors or suppliers and deduct the amount paid, together with reasonable costs and attorneys' fees, from compensation due the Subcontractor under this Agreement. The acceptance by the Subcontractor of the final payment under this Agreement shall operate as a release to the Contractor and the Client for all claims and liability of the Subcontractor, its representatives, subcontractors, suppliers and assigns for any additional compensation or payment relating to any and all things done or furnished relating to the Services rendered by the Subcontractor in performance of its work under this Agreement. Final payment shall in no way relieve the Subcontractor of liability for its obligations or for faulty or defective work discovered after final payment.

GC 22. PUBLICITY RELEASES - All publicity releases or releases of reports, papers, articles, maps, or other documents in any way concerning this Agreement or the Services hereunder which the Subcontractor or any of its subcontractors desires to make for purposes of publication in whole or in part, shall be forwarded to the Contractor for review and approval of the Client prior to release.

GC 23. SPECIAL PROVISIONS - Special Provisions to this Agreement are included in Attachment "E" (Special Provisions). The Special Provisions shall take precedence over the General Conditions in the event of a conflict between the terms of the General Conditions and Special Provisions.

GC 24. LIMITATION OF LIABILITY

A. Neither Party shall be liable to the other Party for economic or consequential damages.

B. In no event shall Subcontractor's liability under this Agreement exceed 100% of the Agreement Price; provided that such limitation of liability shall not apply to Subcontractor's indemnity obligations under GC.13.

ATTACHMENT "A"
SCOPE OF SERVICES

The Scope of Services to be performed by the Subcontractor shall be generally as follows:

Attached Alstom Scope of Work – Revision #4, dated July 25, 2011

PARSONS

100 Broadway • New York, NY 10005 • (212) 266-8300 • Fax: (212) 266-8536 • www.parsons.com

Scope of Work – Revision 4

For

Alstom Signaling



**Design, Furnish, Construct, Test and
Commission the ASES II Positive
Train Control System**

Sealed Bid No. 10-099X

ALSTOM Services**(This is not a comprehensive list; further detail is below in the compliance matrix)**

1. For the purposes of this agreement and scope of work, the term “ASES II” shall mean Alstom ACSES PTC and CSS system only.
2. Alstom shall provide overall design expertise and responsibility for an RSIA compliant ASES II system, as described in the specification. This includes all discrete design tasks in order to implement the office, wayside and onboard components of the ASES II system and interfacing equipment. This also includes integration responsibility for the elements of this subsystem.
3. Parsons and Alstom will fully support each other to provide NJT a PTC System (i) that meets FRA PTC Rules (49 CFR 236 Subpart I); and (ii) is completely interoperable with Amtrak and the Northeast Corridor; and (iii) whose design approach “shall be based upon the foundation provided by the Amtrak ACSES II plus ATC system” (the “ACSES II Base System”) being implemented for Amtrak on the NEC.

The NJT Technical Specification requests certain functions specific to NJT that differ from the ACSES II Base System. These functions may require operating rules implementations and some design changes.

In order to obtain NJT’s design concurrence and a modified ACSES II Base System Type Approval from FRA, Alstom and Parsons will utilize an approach which is consistent with Parsons’ Technical Proposal, including development of design alternatives and operating rules changes. The parties’ intent is to minimize design changes to the ACSES II Base System in order to deliver an FRA-approved system on time and within budget.

In the event that NJT directs the implementation of any NJT-specific functions that result in significant design changes to the ACSES II Base System which are not required per the above-referenced FRA PTC Rules, Parsons and Alstom will work together to provide NJT with justification to cover such work (cost and schedule) under the Contract Supplemental Engineering Allowances or, alternatively, as a Contract Change Order. NJT specific functions that could result in significant design changes to the ACSES II Base System potentially include, for example: PTS Release initiated by PRT directly to train (or via the TSR server), or multiple TSR types (different from that within the ACSES II Base System), or undefined requirements (i.e. operating scenarios). Parsons and Alstom will share responsibility for implementation of any such NJT-specific functions.

4. Alstom shall provide a vehicle installation facility, and be responsible for all associated logistics and costs.
5. Alstom shall provide qualified operators to move equipment in and out of the shop.
6. Alstom shall provide factory assembly, wiring and testing of ALSTOM supplied equipment and racks.
7. Alstom shall provide a lab to demonstrate their ASES II equipment for NJT’s Phase I.
8. Alstom shall perform all onboard installation design.
9. Alstom shall perform all onboard installations, including but not limited to SES, CSS, CHER, data radio, antenna and communication manager.
10. Alstom shall provide required documentation for their ASES II supplied equipment.
11. Alstom shall provide shipping and logistical coordination for all supplied equipment.
12. Alstom shall provide Parsons with all necessary Alstom ASES II equipment and system requirements in order to interface to other components and/or subsystems. Although not a comprehensive list, this includes interface with V-ETMS, Roadway Worker Protection devices, CHER, communications managers (wayside or onboard), data radios, Network Management System (NMS), TMAC or NJT backhaul.
13. Alstom shall provide all interface designs to existing signal wayside equipment.
14. Alstom shall provide all transponder layout designs
15. Alstom shall provide all transponders and program plugs.

16. While the 220 MHz Amtrak data radio procurement is currently an allowance, Alstom shall still be responsible for interface to this equipment both on the wayside and onboard.
17. Alstom shall perform program changes as necessary to existing microprocessor based interlocking control systems.
18. Alstom shall provide all necessary inputs for their ASES II equipment in order to complete the FRA submittals described in the contract.
19. Alstom shall provide as-built drawings for all installed onboard equipment, ASES II office and ASES II wayside systems. The wayside as-built shall include all WIU interface locations.
20. Alstom shall provide equipment operation and maintenance manuals for ALSTOM supplied equipment.
21. Alstom shall provide training materials for Alstom supplied equipment in accordance with the specification.
22. Alstom shall provide all testing procedures for their ASES II system.
23. Alstom shall provide test Engineers/Technicians for the test and commissioning of ALSTOM supplied equipment.
24. Alstom shall provide technicians to provide direction to NJT employees installing Alstom provided equipment including but not limited to transponders and WIU's.
25. Alstom shall comply with overall configuration management plans, procedures and software implemented by Parsons.
26. Alstom shall execute all described software license agreements and escrow software as required by contract.
27. Alstom shall participate in all necessary technical and programmatic meetings during the course of the contract in order to deliver the work.
28. Alstom shall provide CDRL's and associated support as indicated in the CDRL responsibility table, as well as other submittals outlined in the contract, as required to deliver their scope.
29. Alstom shall provide DBE participation and associated project reporting at a value to be agreed upon prior to final price submission.
30. Alstom shall provide warranty support services compliant with the NJT contract.
31. Alstom shall provide DBE contribution equal to 10% of their Agreement Price.
32. Alstom shall provide the on-board equipment technician, ROC installation technician, and wayside equipment technician described in General Provision 52 of the NJT contract. This support will be provided for the duration of the base warranty and extended warranty periods.
33. Alstom shall provide the web-based parts ordering system and warehousing described in General Provision 49 of the NJT contract.
34. Alstom shall be responsible for producing the contract master training plan for coordinating all contract training.
 - Inputs will be received from Parsons and other subcontractors for non-Alstom provided subsystems
 - Alstom will coordinate all training inputs, Subcontractors are responsible for creation of required training materials for their respective inputs.
 - Parsons is responsible to ensure that non-Alstom subcontractors provide timely input to Alstom
 - Alstom will create and maintain the master training schedule for the project, coordinating with NJT as required. Actually project submissions will be made to Parsons for submission to NJT
 - Alstom will provide feedback to Parsons on training progress and deliverables.
 - Classroom delivery of training will be the responsibility of the party providing the specific material or subsystem.
 - ETMS training is considered as part of the contract allowances and is therefore totally excluded from the Alstom training requirements.
35. Alstom will be responsible for any engineering interface associated with the use of the Invensys CHER which will be procured by Parsons.
36. Alstom will provide a Parent Company Guarantee equal to 100% of its agreement price for all awarded phases and options, excluding Option 8 (extended warranty). This PCG shall be in

force from the time of contract execution until the conclusion of the base project warranty at which time it will expire. The extended warranty provided as Option 8 for this contract will then be secured by Alstom with another PCG equal to the agreement price for Option 8. This second PCG will be in force for the duration of the option warranty period.

ALSTOM Material

(This is not a comprehensive list; further detail is below in the compliance matrix)

1. Alstom shall provide wired and factory tested wayside equipment racks for installation inside CIL's to interface with existing signal system.
2. Alstom shall provide the onboard ASES II package
3. Alstom shall provide the onboard cab signal package
4. Alstom shall provide the SDU's.
5. Alstom shall provide the ADU's (priced as a contract option).
6. Alstom shall provide the onboard transponder readers.
7. Alstom shall provide the onboard speed sensors
8. Alstom shall provide the onboard data recorder.
9. Alstom shall provide decelerometers (as required to comply with contract).
10. Alstom shall provide the Office Safety Server (STS).
11. Alstom shall provide the Office Interface Server.
12. Alstom shall provide a Backup Management System for their office components.
13. Alstom shall provide the Wayside Interface Units for the ACSES system.
14. Alstom shall provide the transponders.
15. Alstom shall provide material as required for specific EMI/EMC testing
16. Alstom shall provide design, material and staff support required specifically to carry out their role in the Prototype and Demonstration phase of the project.
17. Alstom shall provide lab simulation equipment adequate to conduct factory acceptance testing with simulated external inputs and scenarios.
18. Alstom shall be responsible for any ancillary equipment, (power supplies, rectifiers, filters, wire) that is specifically necessitated to implement the material within their scope.
19. Alstom shall provide all special tools and test equipment as required in the specification for installation, commissioning or maintenance of supplied equipment.
20. Alstom shall provide individual wire tags for new signal house wiring.
21. Alstom shall furnish all contract stipulated spare equipment, as it pertains to its scope of supply for delivery to NJ Transit.
22. Alstom shall maintain adequate on-site commissioning spares to enable prompt replacement of any failed equipment during the field test/commission period.

Items Excluded from Alstom Scope, unless Alstom is specifically noted as a contributor below

1. Installation of wayside communications equipment.
2. Installation of office (ROC and EBF) equipment.
3. Installation of signal equipment defined in specifications as NJ Transit force account.
4. Roadway worker protection devices (PRT's).
5. Supply of wayside communication cases.
6. Crash Hardened Event Recorder (CHER) procurement.
7. V-ETMS design and material supply.
8. V-ETMS simulator supply.
9. TMAC modifications.
10. Network Management System.
11. 900 MHz and 220 MHz data radios.
12. Onboard and wayside communications managers.
13. Wayside communication towers, poles or antennas.



14. RF survey work
15. GIS survey work
16. Provision for Interactive Multimedia training – Alstom will act as a contributor
17. Training Deliverables for non-Alstom provided subsystems, including manuals, presentations, end user guides
18. Training delivery for non-Alstom provided subsystems
19. Provision for FRA compliant training simulator – Alstom will act as a contributor.
20. Overall PTC integration – Alstom will act as a contributor by providing the requirements for Alstom supplied materials, systems and equipment in order to interface with other components and or subsystems. Parsons will be responsible for the overall system integration.
21. Creation of PTCDP and PTCSP – Alstom will act as a contributor.
22. Primary project schedule creation/management – Alstom will act as a contributor.
23. Primary QA responsibility – Alstom will act as a contributor and provide QA for its scope of supply.
24. Primary Configuration Management responsibility – Alstom will act as a contributor.
25. Primary RAMS Management – Alstom will act as a contributor for its scope of supply.
26. Primary Safety Management – Alstom will act as a contributor for its scope of supply
27. Bid Bond and Performance Bond.

Specification Compliance Matrix – Volume 2 Technical

(G = general information applicable to all, P = primary scope responsibility, S = secondary scope responsibility, N/A = excluded from scope)

Specification Section	Parsons	Alstom	Notes
Part I – General			
1.01 - Purpose	G	G	
1.02 – Definitions	G	G	
1.03 – Abbreviations & Definitions	G	G	
1.04 – Existing System Description	G	G	<ul style="list-style-type: none"> ◆ Parsons shall perform validations (GIS) of existing wayside infrastructure ◆ Alstom shall determine and design interface to existing signal system for ASES II system. ◆ Alstom shall be responsible for all onboard system installation.
1.05 – Scope			
A. General #1	G	G	
A. General #2	G	G	
A. General #3	P	S	◆ Parsons shall lead project integration, with full support by Alstom for ASES II
A. General #4	G	G	
A. General #5	P	S	<ul style="list-style-type: none"> ◆ Parsons responsible for supply of V-ETMS system. ◆ ALSTOM to provide necessary integration, including but not limited to accommodating wayside inputs into WIU
A. General #6	G	G	

A. General #7	G	G	
A. General #8	S	P	
A. General #9	S	P	
A. General #10	G	G	
A. General #11	G	G	
A. General #12	G	G	◆ Data radio procurement is currently an allowance item. Alstom shall include installation costs of all onboard communications equipment in the base scope.
A. General #13	S	P	
A. General #14	P	S	
B. Onboard Equipment	S	P	◆ Alstom is responsible for the retrofit of all required onboard equipment
C. Project Phases – Phase I	P	P	<ul style="list-style-type: none"> ◆ Parsons shall lead PTCDP development with support from Alstom ◆ Parsons shall lead PTCSF development with support from Alstom ◆ Parsons shall provide the CHER – Alstom to demonstrate with other onboard components ◆ Alstom to provide SDU ◆ Alstom to provide onboard package as well as all mounting hardware and material
C. Project Phases – Phase II	P	P	<ul style="list-style-type: none"> ◆ Parsons shall supply V-ETMS equipment, Alstom to provide interface via WIU. ◆ Parsons shall perform radio coverage work. ◆ Parsons is responsible for wayside communications install ◆ Alstom is responsible for onboard work – including supply of training materials ◆ Alstom shall provide signal design and interface definition for work by NJT forces. Training materials to also be supplied as required. ◆ Alstom to supply on-site support during demonstration and perform SAT for elements within scope of supply. ◆ Alstom to supply technical publications for items supplied under Phase II
C. Project Phases – Phase III	P	P	<ul style="list-style-type: none"> ◆ Parsons is responsible for PRT's ◆ All parties to appropriately staff the rollout of their respective scope of supply.
D. Options	G	G	
D.1 – Option #1	Excluded	Excluded	

D.2 – Option #2	S	P	<ul style="list-style-type: none"> Alstom is responsible for onboard equipment and retrofit work, minus supply of CHER and radio equipment.
D.3 – Option #3	Excluded	Excluded	<ul style="list-style-type: none"> River Line option has been removed from contract
D.4 – Option #4	S	P	<ul style="list-style-type: none"> Alstom will not provide pricing as part of base price as addendum #7 made this an allowance. Alstom will provide pricing to Parsons when pricing is requested by NJT.
D.5 – Option #5	P	P	<ul style="list-style-type: none"> Division of responsibilities shall be the same as for work on base NJT mainline, with MNRR performing wayside signaling installation. Cost of additional Southern Tier worksite, if required, shall be responsibility of Parsons
D.6 – Option #6	Excluded	Excluded	<ul style="list-style-type: none"> This is removed from the base scope according to addendum #7.
D.7 – Option #7	P	P	<ul style="list-style-type: none"> Division of responsibilities shall be the same as for work on base NJT mainline.
D.8 – Option #8	P	P	<ul style="list-style-type: none"> Alstom to supply extended warranty pricing for all elements within scope of supply
E. Contract Date Requirements List	P	S	<ul style="list-style-type: none"> Parsons shall lead CDRL process with input from Alstom on all items within their scope of supply The CDRL list created between Parsons and Alstom at time of proposal should be considered the guide in determining ownership of submittals
F. Scheduling and Milestones	P	S	<ul style="list-style-type: none"> Parsons shall manage the master project schedule. Alstom shall staff PM and schedule staff in order to manage their portion of work. Alstom shall submit monthly schedule updates
1.06 Project Management			
A. General	G	G	
B. Personnel	P	S	<ul style="list-style-type: none"> Parsons shall provide the lead Project Management for the project. Parsons shall implement the overall Project Quality Program Parsons shall implement the overall Configuration Management Plan Alstom shall staff PM and support personnel to support Parsons and deliver their work.
C. Project Manager	P	S	<ul style="list-style-type: none"> The PM to the client shall be provided by Parsons. Alstom shall have an internal PM to execute their SOW and interface with the Parsons PM. The Alstom PM shall need to travel to the project site on a regular basis.
D. Scheduler	P	S	<ul style="list-style-type: none"> The Scheduler to the client shall be provided by Parsons. Alstom shall have an internal scheduler for their SOW.

E. Quality Manager	P	S	<ul style="list-style-type: none"> ◆ The Quality Manager (QM) to the client shall be provided by Parsons. Alstom shall have an internal QM for their SOW. Alstom shall be responsible for all Quality controls and reporting for their scope of supply.
F. Configuration Manager	P	S	<ul style="list-style-type: none"> ◆ The Configuration Manager (CM) to the client shall be provided by Parsons. Alstom shall internal staff this function to execute their SOW.
G. Systems Integration Manager	P	S	<ul style="list-style-type: none"> ◆ The Systems Integration Manager to the client shall be provided by Parsons. Alstom shall internally staff Systems Engineering personnel to support Parsons and deliver their SOW.
H. Project Management Plan	P	S	<ul style="list-style-type: none"> ◆ PMP shall be done by Parsons. Alstom shall provide input as requested for their scope of supply.
I. Project Metrics	P	S	<ul style="list-style-type: none"> ◆ Project Metrics shall be lead by Parsons. Alstom shall provide input as requested for their scope of supply. ◆ Alstom shall support project meetings with Parsons and NJT to execute their SOW.
1.07 Quality Assurance			
A. General	G	G	<ul style="list-style-type: none"> ◆ Parsons shall supply project level QA program ◆ Alstom shall comply with QA requirements for their scope of supply ◆ Alstom shall be responsible for submission and certification of test results for equipment within their scope ◆ Reliability analysis to be done by Alstom for equipment within their scope
B. Software Quality Assurance	P	S	<ul style="list-style-type: none"> ◆ Parsons shall supply project level SQAP ◆ Alstom shall contribute to and perform to the project level plan
C. Software Verification & Validation	P	S	<ul style="list-style-type: none"> ◆ Parsons shall supply project level SV&V Plan ◆ Alstom shall contribute to and perform to the project level plan
D. Software Configuration Management	P	S	<ul style="list-style-type: none"> ◆ Parsons shall supply project level SCMP ◆ Alstom shall contribute to and perform to the project level plan
E. Hardware Quality Assurance	P	S	<ul style="list-style-type: none"> ◆ Parsons shall supply project level HQAP ◆ Alstom shall contribute to and perform to the project level plan
F. Hardware Configuration Management	P	S	<ul style="list-style-type: none"> ◆ Parsons shall supply project level HCMP ◆ Alstom shall contribute to and perform to the project level plan
1.08 System Requirements			
A. System Description #1	G	G	
A. System Description #2	G	G	
A. System Description #3	P	P	<ul style="list-style-type: none"> ◆ Parsons is responsible for V-ETMS reference. ◆ Alstom is responsible for ASES II

			requirements
A. System Description #4	P	P	<ul style="list-style-type: none"> ◆ Parsons is responsible for V-ETMS reference. ◆ Alstom is responsible for ASES II requirements
A. System Description #5	P	P	<ul style="list-style-type: none"> ◆ Parsons is responsible for V-ETMS reference. ◆ Alstom is responsible for ASES II requirements
A. System Description #6	P	P	<ul style="list-style-type: none"> ◆ Parsons is responsible for V-ETMS reference. ◆ Alstom is responsible for ASES II requirements
A. System Description #7	S	P	<ul style="list-style-type: none"> ◆ Parsons is responsible for any V-ETMS system calculations. Alstom is responsible for ASES II and CSS calculations.
A. System Description #8	N/A	P	
A. System Description #9	P	S	<ul style="list-style-type: none"> ◆ Parsons shall lead this failure mode analysis with support from Alstom for all work within their scope
A. System Description #10	N/A	P	
A. System Description #11	N/A	P	
A. System Description #12	P	S	<ul style="list-style-type: none"> ◆ Parsons shall lead systems integration with support from Alstom for all work within their scope
B. Basic Operating Scenarios	G	G	
C. Onboard Functional Requirements	S	P	<ul style="list-style-type: none"> ◆ Alstom is responsible for onboard requirements, minus supply of data radio (allowance) and CHER. Alstom must provide interface to radio and CHER.
D. Wayside Functional Requirements	P	P	<ul style="list-style-type: none"> ◆ Alstom shall provide equipment and meet requirement for transponders ◆ Alstom shall provide equipment and meet requirements for WIU's ◆ Data radio's is considered scope within the allowance items ◆ Parsons shall coordinate bandwidth procurement/licensing as required ◆ Parsons shall be responsible for RWP functions ◆ RWP gateway is considered scope within the allowance items
E. System Functionality	P	P	<ul style="list-style-type: none"> ◆ Parsons is responsible for functions as they relate to V-ETMS system ◆ Alstom is responsible for functions as they relate to ASES II or CSS systems
F. Operating Territories and Modes	P	P	<ul style="list-style-type: none"> ◆ Parsons is responsible for functions as they relate to V-ETMS system ◆ Alstom is responsible for functions as ◆ River Line option is removed from the scope of contract
G. Special Conditions and Functions	P	P	<ul style="list-style-type: none"> ◆ Parsons is responsible for RWP functions. Alstom shall provide

			<ul style="list-style-type: none"> ◆ necessary interface for ASES II system ◆ Parsons is responsible for functions as they relate to V-ETMS system ◆ Alstom is responsible for functions as they relate to ASES II or CSS systems
H. System Failures, Default Conditions and Reset Operations	P	P	<ul style="list-style-type: none"> ◆ Parsons is responsible for functions as they relate to V-ETMS system ◆ Alstom is responsible for functions as they relate to ASES II or CSS systems
I. Control Center Functional Requirements	P	S	<ul style="list-style-type: none"> ◆ Parsons shall be the lead for control center modifications and responsible for functions as they relate to V-ETMS ◆ Alstom shall be responsible for the safety server and any associated ASES II functionality ◆ The River Line option work has been removed from the contract
J. Basic Operating Scenarios	P	P	<ul style="list-style-type: none"> ◆ Parsons is responsible for functions as they relate to V-ETMS system ◆ Alstom is responsible for functions as they relate to ASES II or CSS systems
K. Office System Components	P	P	<ul style="list-style-type: none"> ◆ Parsons is responsible for functions as they relate to V-ETMS system ◆ Alstom is responsible for functions as they relate to ASES II or CSS systems
L. Basic Functional Requirements – Safety Server (STS)	N/A	P	
M. Basic Functional Requirements – Interface Server (IFS)	N/A	P	
N. Basic Functional Requirements – Backup Management System	P	P	<ul style="list-style-type: none"> ◆ Each party shall be responsible for backup management of devices and data within their scope of supply.
O. Basic Functional Requirements – Interface Management System	P	S	<ul style="list-style-type: none"> ◆ Parsons will lead this function, with support from Alstom for required ASES II interface and diagnostics related to their scope of material supply.
P. Basic Functional Requirements – Communications Network	P	S	<ul style="list-style-type: none"> ◆ Parsons shall lead this requirement. Alstom shall provide necessary support and communications interface for items within their scope
1.09 Reliability, Availability, Maintainability, Safety			
A. General	G	G	
B. Types of Failures	G	G	
C. RAMS Plan	P	S	<ul style="list-style-type: none"> ◆ Parsons shall develop the overall project RAMS plan. ◆ Parsons shall develop the overall project FMECA ◆ Alstom shall provide all necessary data and analysis of ASES II system in order to meet the specification requirements
D. Availability	P	S	<ul style="list-style-type: none"> ◆ Parsons shall own the overall system availability analysis. ◆ Alstom shall perform all required

			analysis for the ASES II system
E. Maintainability	P	S	<ul style="list-style-type: none"> ◆ Parsons shall own the overall system availability analysis. ◆ Alstom shall perform all required analysis for the ASES II system
1.10 Submittals			◆
A. General	G	G	◆
B. Submittal List	P	S	<ul style="list-style-type: none"> ◆ Parsons shall produce overall project submittal list, Alstom shall support this effort for all submittals under their scope ◆ Parsons shall perform the maintenance of the submittal list, with input as required from Alstom
1.11 Testing			
A. General	G	G	<ul style="list-style-type: none"> ◆ Parsons shall lead the development of the overall prototype/demonstration program. ◆ Alstom shall develop and execute all portions related to ASES II material or requirements.
B. Factory Acceptance Test	P	P	<ul style="list-style-type: none"> ◆ Parsons is responsible for functions as they relate to V-ETMS system Alstom is responsible for functions as they relate to ASES II or CSS systems
C. Site Acceptance Test	P	P	<ul style="list-style-type: none"> ◆ Parsons shall be responsible for SAT plans that deal with integrated system testing of various subsystems. ◆ Parsons shall be responsible for SAT plans for V-ETMS components ◆ Parsons shall be responsible for described amendments to PTCDP and PTCSP ◆ Alstom shall be responsible for all ASES II and CSS specific field tests
1.12 Training Plan	P	S	<ul style="list-style-type: none"> ◆ Alstom shall be responsible for the Master Training Plan. ◆ Parsons shall be responsible for incorporation of Master Training Plan into PTCSP. ◆ Alstom shall be responsible to produce all training materials for ASES II subsystem ◆ Parsons will provide training materials as required for the communications subsystem. ◆ Alstom shall conduct actual classroom training for the ASES system. ◆ Parsons shall be responsible for Interactive Multimedia Instruction
1.13 Documentation	G	G	
2.01 Design Criteria			
A. General #1	G	G	
A. General #2	G	G	
A. General #3	P	S	<ul style="list-style-type: none"> ◆ Parsons shall be responsible for Systems Design Document, with support from

			<p>Alstom for their scope of work.</p> <p>◆ Both Parsons and Alstom shall respect the language in this paragraph.</p>
A. General #4	G	G	
A. General #5	G	G	
A. General #6	S	P	<p>◆ Alstom is responsible for definition of all mechanical and electrical fit-out for installation of onboard equipment and WIU equipment. This includes any necessary software changes at existing locations.</p> <p>◆ Parsons is responsible for installation provisions of wayside communications equipment.</p>
A. General #7	N/A	P	
A. General #8	S	P	<p>◆ Alstom is responsible for definition of all mechanical and electrical fit-out for installation of onboard equipment and WIU equipment. This includes any necessary software changes at existing locations.</p> <p>◆ Parsons is responsible for installation provisions of wayside communications equipment.</p>
A. General #9	P	S	<p>◆ Parsons is responsible for this requirement, Alstom shall support for definition of connections to any of their supplied equipment.</p>
A. General #10	P	N/A	
A. General #11	P	S	<p>◆ Parsons shall lead the project phasing definition. Alstom shall support this effort for all equipment and design within their scope of supply.</p>
A. General #12	P	P	<p>◆ Each party shall be responsible for this requirement for equipment within their scope of supply.</p>
A. General #13	P	P	<p>◆ Each party shall be responsible for this requirement for equipment within their scope of supply.</p>
A. General #14	P	S	<p>◆ Parsons is the lead for project schedule definition. Alstom shall support for all elements within their scope of supply.</p>
A. General #14 – Phase I – Prototype	P	P	<p>◆ Parsons shall lead the development of the PTCDP with support from Alstom for all ASES II and CSS elements.</p> <p>◆ Alstom shall comply with all requirements for design, equipment prototype, FAT and simulation for all ASES II and CSS elements described.</p> <p>◆ Parsons is responsible for final PTCSP updates at the end of this phase, with support from Alstom.</p>
A. General #14 – Phase II – System	P	P	<p>◆ Parsons is responsible for the radio coverage studies.</p> <p>◆ Alstom shall comply with all</p>

Demonstration			<p>requirements for design, equipment supply and SAT for all ASES II and CSS elements described. This shall include on-site support as required to demonstrate and test all elements within their scope of supply.</p> <ul style="list-style-type: none"> ◆ Alstom is responsible for all vehicle retrofit design and implementation. ◆ Parsons shall lead the FRA documentation updates with support from Alstom for ASES II and CSS elements. ◆ Parsons is responsible for elements associated with the PRT, central dispatch and V-ETMS subsystems.
A. General #14 – Phase III – System Wide Deployment	P	P	<ul style="list-style-type: none"> ◆ Parsons shall be responsible for GIS data verification ◆ Parsons shall lead the database administration work, with support from Alstom to understand the requirements for the ASES II system. ◆ Parsons shall be responsible for systemwide single line track layout, with Alstom supplying all calculations and inputs for elements within its scope of supply (transponders, WIU's, civil speeds) ◆ Parsons shall lead the Office systems definition documents with Alstom providing all inputs for office elements within their scope of supply. ◆ Parsons will supply communication cases. ◆ Alstom shall be responsible for the survey of all existing signal houses in order to define WIU interface requirements. ◆ Alstom is responsible for all design documents for the ASES II and CSS components within their scope of supply. ◆ Alstom is responsible for all onboard installation and test.
B. Functional Requirements	G	G	
C. Hardware Configuration	P	P	<ul style="list-style-type: none"> ◆ Alstom shall provide hardware designs for all elements within their scope of supply and comply with the requirements of this section.
D. Software Configuration	P	P	<ul style="list-style-type: none"> ◆ Parsons shall lead the software configuration process for the project. ◆ Alstom shall provide all required software for its ASES II components as well as software modifications as necessary to existing CSS and interlocking control systems.
E. Software Escrow Agreement	P	P	<ul style="list-style-type: none"> ◆ Both Parsons and Alstom must comply with this section. Each party shall be individually responsible for escrow costs for software under their scope of supply.

F. Software License Agreement	P	P	◆ Both Parsons and Alstom must comply with this section.
G. Human-Machine Interface	P	P	◆ Alstom shall comply with all requirements and deliverables for HMI's under their scope of supply. This includes, but not limited to, SDU's and any equipment interfaces in the ROC.
2.02 Wayside Hardware			◆
A. General	G	G	◆ Identification of wayside power requirements shall be the responsibility of the party supplying the particular device.
B. Personal Remote Terminal	P	N/A	
C. Wayside Interface Unit	N/A	P	
D. Transponders	N/A	P	
E. Base Communications Package	P	S	◆ Parsons is responsible for the base communications package as this is currently an allowance item. Alstom is responsible to support necessary interface.
F. 220 MHz Radio	P	S	◆ Parsons is responsible for the 220 MHz radio as this is currently an allowance item. Alstom is responsible to support necessary interface. ◆ Parsons is responsible for the radio coverage analysis.
G. Antenna	P	N/A	
H. Wood Poles	P	N/A	
I. Aluminum Poles	P	N/A	
J. Free Standing Towers	P	N/A	
2.03 Onboard Hardware			
A. General	G	G	◆ Alstom shall be responsible to satisfy the requirement for issuance of TSR unique to electric trains.
B. Speed Display Unit	N/A	P	
C. Optional Aspect Display Unit	N/A	N/A	◆ Section has been removed by addendum #6.
D. Hardware Configuration	N/A	P	
E. Software Configuration	S	P	◆ Alstom shall supply all software and comply with the applicable requirements for ASES II and CSS components within their scope of supply. Parsons shall oversee this work to ensure compliance with project level systems integration and configuration management.
F. Cab Signal System	N/A	P	
G. Speed Enforcement System	N/A	P	

H. Mobile Communications Package	P	S	◆ Parsons is responsible for the MCP, which is currently part of a contract allowance. Alstom shall be required to interface with this package.
I. Speed Sensors	N/A	P	
J. Decelerometer	N/A	P	
K. Crash Hardened Event Recorder	P	P	◆ Parsons shall procure the CHER device. ◆ Alstom shall perform installation design and installation on trains. Alstom shall also perform setup and configuration of the device.
L. Data Recorder	N/A	P	
M. Data Retrieval and Review	N/A	P	
2.04 Control Office			
A. General	P	P	◆ The River Line option has been removed from the contract by NJ Transit. ◆ Parsons shall be responsible for the described V-ETMS components. ◆ Parsons shall be responsible for the described modifications to AIM system. ◆ Alstom shall be responsible for all described ASES II office components.
B. Safety Server (STS)	N/A	P	
C. Power Supply	N/A	P	
D. Interfaces	P	P	◆ Parsons shall be responsible for project level interface control document. ◆ Alstom shall be responsible for documentation and interface of all their office provided ASES II systems and components.
E. Interface Server	N/A	P	
F. Backup Management	P	P	◆ Each party shall be responsible for backup management of devices and data within their scope of supply.
G. IFMS	P	N/A	
H. Interfaces	P	P	◆ Parsons shall be responsible for project level interface control document. ◆ Alstom shall be responsible for documentation and interface of all their office provided ASES II systems and components
2.05 Communications Network	P	S	◆ Parsons is responsible for the communications network. Alstom shall provide support for all necessary interfaces of ASES II equipment within their scope.
2.06 Documentation			
A. General	P	P	◆ Parsons is responsible for creation of project level Configuration Management Plan and Project Management Plan.

			◆ Alstom shall provide all documentation for items within their scope of supply.
B. Completeness and Accuracy of Documents	G	G	
C. Design Documents, Manuals, and Training Materials	G	G	
D. Technical Documentation Requirements	G	G	
E. Drawings	G	G	
F. Format Requirements for Drawings	G	G	
G. Systems Design Document	P	S	<ul style="list-style-type: none"> ◆ Parsons is responsible for the project level Systems Design Document. ◆ Alstom shall support this requirement with all required input for ASES II components within their scope of supply.
H. RAMS Documents	G	G	
2.07 Investigative Procedures	P	S	<ul style="list-style-type: none"> ◆ Parsons shall have primary responsibility to develop the necessary elements of this section. Alstom shall provide input and support for all items within their scope of supply.
2.08 Testing			
A. General Requirements	P	S	<ul style="list-style-type: none"> ◆ Parsons is responsible for the project level Master Test Plan. ◆ Alstom shall provide input and support to creation and management of Master Test Plan for their scope of supply ◆ Alstom shall provide any special test equipment required for items within their scope of supply.
B. Quality Assurance	G	G	
C. Test Procedures	G	G	
D. Factory Acceptance Testing	P	P	<ul style="list-style-type: none"> ◆ Alstom shall provide all FAT test procedures and prefilled data sheets for components and subsystems within their scope of supply. ◆ Alstom shall perform the complete factory execution of their test procedures
E. Site Acceptance Testing	P	P	<ul style="list-style-type: none"> ◆ Alstom shall provide all SAT test procedures and prefilled data sheets for components and subsystems within their scope of supply. ◆ Alstom shall perform the complete field execution of their test procedures. ◆ Alstom shall provide the necessary Certificate of Completion for testing under their responsibility.
F. EMI/EMC Measurement and Test	P	S	<ul style="list-style-type: none"> ◆ Parsons is responsible for overall project EMI/EMC Plan

Plan			<ul style="list-style-type: none"> ◆ Parsons shall schedule testing, working with NJT and appropriate subcontractors ◆ Parsons shall be responsible for EMI site surveys ◆ Alstom shall provide any specific ASES II equipment EMI/EMC measurement test procedures it requires to be incorporated into overall test plan ◆ Alstom shall provide its analysis of measurements and test results for any failed equipment. ◆ Alstom shall provide equipment for testing if such equipment is within their scoped of supply
2.09 Training			
A. General	P	S	<ul style="list-style-type: none"> ◆ Alstom shall be responsible for the Master Training Plan ◆ Parsons shall be responsible for the Interactive Multimedia Instruction program and delivery of other non Alstom systems. ◆ Alstom shall conduct the classroom training component for the ASES II system.
B. Master Training Plan	P	S	<ul style="list-style-type: none"> ◆ Alstom shall be responsible for the Master Training Plan. ◆ Parsons shall provide all required training for ARINC supplied systems. ◆ Alstom shall provide any required ACSES simulators, hardware or software to enable training of NJT forces.
C. Training Materials and Manuals	P	S	<ul style="list-style-type: none"> ◆ Alstom shall lead this overall effort. ◆ Alstom shall provide all necessary installation, operations and maintenance manuals pertaining to the ASES II system under their scope.
D. Train Engineer Simulation Training	P	S	<ul style="list-style-type: none"> ◆ Parsons shall provide the Train Engineer Simulator. ◆ Alstom shall provide necessary engineering inputs and scenario descriptions (for ASES II) in order to facilitate the development of this simulator.
E. Train-the-Trainer	P	S	<ul style="list-style-type: none"> ◆ Alstom shall develop the customer train-the-trainer methodology. ◆ Alstom shall provide input for the ASES II system under their scope of supply.
F. Training Material	P	S	<ul style="list-style-type: none"> ◆ Alstom shall be responsible for all training materials, manuals, guides and tools for the ASES II equipment within their scope of supply. ◆ Parsons shall be responsible for training materials for ARINC supplied components.
G. Configurations Management	P	S	<ul style="list-style-type: none"> ◆ Parsons shall lead this portion of the work with input from Alstom for the ASES II scope.

H. Safety Program			<ul style="list-style-type: none"> ◆ Parsons shall lead this portion of the work with input from Alstom for the ASES II and CSS scope. ◆ Alstom shall safety certify their deliverables if required by specification.
2.10 Electromagnetic Compatibility	P	P	<ul style="list-style-type: none"> ◆ Parsons shall lead the project level EMC planning and coordination for the project. ◆ Alstom shall supply all required input specific to their ASES II and CSS equipment and shall supply materials in compliance with the specification.
2.11 Reliability, Availability, Maintainability, Safety	P	P	<ul style="list-style-type: none"> ◆ Parsons shall be responsible for the project level RAMS plan. Alstom shall provide all necessary inputs to this for the ASES II and CSS equipment within their scope. ◆ Alstom shall provide materials compliant with all the stated requirements. ◆ Alstom shall provide Failure Analysis Reports, as required, for any equipment within their scope. ◆ Alstom shall comply with all manufacture and procurement approval requirements
2.12 Contract Data Requirements List	P	S	<ul style="list-style-type: none"> ◆ Parsons shall lead the creation of the CDRL, with input from Alstom for elements within their scope. ◆ Actual ownership (and support) for individual CDRL items has been defined on a separate spreadsheet between Parsons and Alstom.
2.13 Spare Parts and Test Equipment			
A. General	G	G	
B. Spare Parts	P	P	<ul style="list-style-type: none"> ◆ Alstom shall supply all required spare parts for ASES II and CSS equipment within their scope of supply.
C. Test Equipment	P	P	<ul style="list-style-type: none"> ◆ Parsons shall supply test equipment specific to V-ETMS functionality ◆ Alstom shall supply any necessary office tools for their supplied equipment. ◆ Alstom shall supply all shop simulators described. ◆ Alstom shall supply test and configuration units for the wayside equipment within their scope of supply. ◆ Alstom shall supply all onboard tools and equipment.
D. Parts Catalog/List	P	S	<ul style="list-style-type: none"> ◆ Alstom shall lead the Part Catalog/List, with input from ARINC for their scope of work.
3.01 Mobilization	P	S	<ul style="list-style-type: none"> ◆ Parsons shall be responsible for securing and mobilizing a project office site. ◆ Alstom shall be responsible for securing and mobilizing a vehicle installation site. ◆ Alstom shall issue all insurance certifications in the contract stipulated

			timeframes.
3.02 Shipping, Staging and Storage Areas			♦
A. General	P	P	<ul style="list-style-type: none"> ♦ Each party shall be responsible for the shipping costs of equipment within their scope of work. ♦ Alstom shall perform the on-site acceptance and documentation of any of their equipment shipping to the NJ Transit Orange, NJ facility. ♦ Equipment shall be staged from the factory in order to mitigate required storage and handling. ♦ Parsons is responsible for wayside communications installation of radio, tower and antennae. ♦ Alstom is responsible for all onboard installation work
B. Temporary Storage Sites	P	S	♦ Parsons will be responsible for temporary storage sites if required for non-Alstom equipment. Alstom will provide storage space as possible at vehicle installation facility.
C. Site Inspection	P	P	♦ Alstom shall perform site inspections at ROC, all control points and on vehicle fleets in order to ensure proper planning of work.
D. Equipment Packing and Shipment	P	P	♦ Each party shall be responsible for the equipment within their scope of supply.
E. Delivery			♦ Each party shall be responsible for the equipment within their scope of supply
3.03 Factory Assembly	G	G	
3.04 Installation			
A. Installation Requirement	G	G	
B. On-Board Systems	N/A	P	
C. Wayside Systems	P	S	<ul style="list-style-type: none"> ♦ Parsons shall be responsible for the communications installation. ♦ Alstom shall provide technical support for signal equipment installation as required.
D. Communications Equipment	P	N/A	
E. ASES II and V-ETMS Signal Interfaced Equipment	N/A	P	
F. Antenna Structures	P	N/A	
G. Office Equipment	P	S	<ul style="list-style-type: none"> ♦ Parsons shall perform the installation of ROC and EBF equipment. ♦ Alstom shall support Parsons to ensure design of their office equipment components is optimized for installation purposes. ♦ Alstom shall provide as-built drawings for onboard systems. ♦ Alstom shall provide final wayside signal as-builts, working from NJ Transit

			marked-up installation drawings
3.05 Grounding	P	P	<ul style="list-style-type: none"> Each party shall be responsible for proper grounding design, material and installation for equipment within their scope of supply.
3.06 Testing			
A. General	P	P	<ul style="list-style-type: none"> Each party shall be responsible to provide the stipulated Hardware and or Software Engineer support for the components/subsystems within their scope of supply. Each party shall be responsible for adequate staging material, in case of defective equipment replacement, for material within their scope of supply. Each party shall conduct the requisite component and/or subsystem testing for the material within their scope of supply
B. Demonstration Testing	P	P	<ul style="list-style-type: none"> Both Parsons and Alstom shall provide on-site support for the Demonstration Testing.
C. Vehicle and Wayside Testing and Acceptance	P	P	<ul style="list-style-type: none"> Each party shall be responsible for static testing of equipment within their scope of supply. Alstom shall perform all onboard static testing. Parsons shall lead dynamic testing and the associated coordination with NJ Transit. Alstom shall support as necessary for their ASES II and CSS subsystems.
3.07 Commissioning	P	S	<ul style="list-style-type: none"> Parsons shall lead commissioning phase and the associated coordination with NJ Transit. Alstom shall support as necessary for their ASES II and CSS subsystems, including creation of any test forms specific to their equipment.
3.08 Training	P	S	<ul style="list-style-type: none"> Alstom shall schedule customer training sessions. Alstom shall provide ASES II classroom training as it pertains to its scope. Parsons will provide classroom training for all other subsystems. Alstom shall provide all required training materials and manuals, in the appropriate format, for subsystems and components within their scope of supply.
3.09 Substantial Completion	P	P	<ul style="list-style-type: none"> Parsons shall lead the system level RAMS validation. Alstom shall provide maintenance support as required for equipment within their scope of supply.
3.10 System Support Program	P	S	<ul style="list-style-type: none"> Parsons shall be responsible to develop the System Support Program. This shall require input and support from Alstom for subsystem within their scope of supply.
3.11 Configuration Management	P	S	<ul style="list-style-type: none"> Parsons shall be responsible for creation of project Configuration Management

			system. ♦ Alstom shall support and comply with this program for their scope of supply.
3.12 Warranty			
A. Terms and Conditions	P	P	♦ Each party shall comply with the warranty terms for equipment and subsystems within their scope of supply. ♦ Alstom shall supply 3 field technicians for the duration of the warranty. One will support onboard equipment, another will support ROC installation and the other will support wayside equipment. ♦ Parsons shall provide the temporary office facility (work trailer) to be located at the Meadowlands Maintenance Complex.
B. Warranted Equipment and Work	P	P	♦ Each party shall comply with the warranty terms for equipment and subsystems within their scope of supply.
C. Repairs	P	P	♦ Each party shall comply with the Repairs stipulation for components or subsystems within their scope of supply.
D. Failures	P	P	♦ Each party shall comply with the Failures stipulation for components or subsystems within their scope of supply. This shall include the responsibility for any failure analysis and the cost of final corrective action(s).
E. Reporting	P	P	♦ Each party shall be responsible for Failure Analysis Reporting for components or subsystems within their scope of supply.
F. Delays to Repair	P	P	♦ This requirement applies to each party for their scope of supply and associated warranty.
G. Rework	P	P	♦ This requirement applies to each party for their scope of supply and associated warranty.
H. Extension	P	P	♦ This requirement applies to each party for their scope of supply and associated warranty.
4.01 Measurement and Payment	P	S	♦ Parsons shall lead the creation of measurement and payment schedule with input from Alstom for their scope of supply.
4.02 Formal Technical Milestones and Reviews	P	S	♦ Parsons shall coordinate the scheduling of all reviews with NJ Transit. ♦ Alstom shall be responsible for the complete preparation and execution of technical reviews related to their ASES II subsystem supply.
4.03 Phase I – Prototype Milestones	G	G	
4.04 Phase II – Demonstration Milestones	G	G	
4.05 – Phase III – System Wide Deployment Milestones	G	G	
4.06 – Options and Option Milestones	G	G	
4.07 – Payment Schedule	P	S	♦ Alstom shall submit monthly invoices to Parsons, compliant with the contract

			requirements, for consolidation and submission to NJ Transit.
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ATTACHMENT "B"
SCHEDULE

The Subcontractor shall commence its Services, meet the milestones described in the Prime Contract, and complete its Services, supporting the key phasing deadlines as summarized below:

Phase 1 Completion:	NTP + 18 Months
Phase 2 Completion:	NTP + 24 Months
Phase 3 Completion:	December 15, 2015
Closeout	December 31, 2016
Base Warranty	2 Years commencing in accordance with Prime Contract Article 52.2
Extended Warranty	5 Years commencing upon completion of Base Warranty period

ATTACHMENT "C"
STAFFING PLAN

The Subcontractor shall have a Project Representative at all times for coordination with Contractor and Client. Additionally, the Subcontractor committed certain staff to the Client in the technical proposal. These individuals are summarized below as Project Staff:

Project Representative:

Robert Coriale - Project Manager
1025 John Street
West Henrietta, NY 14586

Project Staff:

Matthew Rivera - Onboard Installation Manager
Juan Antonio Barraza - Lead Test Engineer
Manuel Oancia - Lead Mechanical Engineer
Peter Stamp - Lead Reliability Engineer
Rudolf Sturm - Design Manager ACSES Systems
Alan Campbell - ACSES Database Engineer
Antonio Garcia - ACSES Engineer
Fred Amyot - ACSES Systems Engineer
Martin Ziarko - Design Manager Onboard Systems
Charles David Wright - Onboard Systems Engineer

ATTACHMENT "D" COMPENSATION

The Prime Contract (Attachment "F") initially awards the following elements: Phases-1, 2 and 3 of the Project and Options 4, 7 and 8. Therefore, the initial total compensation amount of this Agreement for Phases 1, 2 and 3 and Options 7 and 8 is *sixty million four hundred seventy-six thousand ninety dollars and fifty-five cents (\$60,476,090.55)*. The Subcontractor agrees to accept the amount stated above as full and complete compensation for completing all work described in the Scope of Services Attachment "A" (applicable to Phases 1, 2 and 3 and Options 7 and 8). Payments shall be based on a mutually agreed upon set of values.

With respect to Option 4, Contractor shall request exclusively from Subcontractor a detailed cost proposal in accordance with Article 12 of the Prime Contract and shall submit Subcontractor's proposal to the Client. Subcontractor shall participate in any negotiations with the Client to modify Subcontractor's proposal. If Subcontractor's proposal (or any agreed upon modification thereof) is accepted by the Client, Contractor shall promptly issue Subcontractor a written change order to incorporate Contract Option 4 at the agreed upon price.

Options 2 and 5 may be exercised by the Client pursuant to the timelines outlined in Prime Contract Article 85, Additional PTC Work and Contract Options. Upon the Client's exercise of Contract Option 2 or Contract Option 5, Contractor shall promptly issue Subcontractor a written change order to incorporate such Contract Option(s) at the itemized lump sum prices indicated below.

Subject to additions and deductions as provided in this Agreement, the total compensation amount (after execution of the above-described change orders) for all Phases and Options (excluding Option 4) outlined in this Agreement is *sixty three million seven hundred ninety nine thousand six hundred four dollars and fifty five cents (\$63,799,604.55)* as detailed below.

In the event the Client fails to incorporate any Contract Options into the Prime Contract, Contractor shall have no obligation to compensate Subcontractor for such items.

Phase-1: \$11,710,733.82

Phase-2: \$2,677,683.45

Phase-3: \$40,190,965.28

Option 7: \$280,168.00

Option 8: \$5,616,540.00

Initial Subcontractor Agreement Amount: \$60,476,090.55

Option 2: \$2,515,823.00

Option 4: \$28,500,000 Allowance

Option 5: \$807,691.00

ATTACHMENT "E"
SPECIAL PROVISIONS

The Agreement between Contractor and Subcontractor is a modification of Contractor's standard sub-Contractor agreement and includes the following Special Provisions:

SP 1. Insurance Requirements - Subcontractor shall provide insurance as described in GC 12 with policy limits and provisions as follows:

Workers Compensation in accordance with the statutory requirements of the State in which the Services are performed and the laws of such other jurisdictions as may apply, and Employer's Liability Insurance in the amount of One Million Dollars (\$1,000,000).

Commercial General Liability in a broad form and in an amount not less than One Million Dollars per occurrence (\$1,000,000) and Two Million Dollars (\$2,000,000) aggregate. This policy will provide coverage for personal and bodily injury, including death, for property damage, and include an endorsement for contractual liability.

Automobile Liability Insurance with limits not less than One Million Dollars (\$1,000,000) for bodily injury and property damage applicable to owned, rented, leased, or borrowed automobiles while in the custody of the insured or anyone driving such vehicles with insured's permission.

SP 2. Quality Assurance - The Subcontractor shall submit a quality assurance and quality control management plan (the "Quality Plan") to the Contractor for review. The Quality Plan shall, with respect to the Services to be performed by Subcontractor, require the implementation of quality control and assurance measures that at a minimum provide for the level of quality specified in Contractor's quality plan. Contractor's quality plan is maintained on the internet and is available for viewing by Subcontractor. Contractor will provide a copy of the Contractor's quality plan upon request.

The Subcontractor shall perform such quality control/assurance checks as provided under the Quality Plan and as required by Client or Contractor to ensure that the Services performed under this Agreement fully conform to all contract requirements and industry standards. Review of the Subcontractor's Quality Plan, and comment or approval by Contractor shall in no way operate to relieve the Subcontractor of the responsibility to establish, maintain, and properly implement such Quality Plan; nor shall it relieve the Subcontractor of its sole responsibility for the quality, technical accuracy, and the coordination of all designs, drawings, specifications, and other services furnished by the Subcontractor. The Subcontractor shall maintain complete records of all quality assurance and quality control verifications performed and those records shall be made available to the Contractor and Client for inspection as may be periodically requested.

Subcontractor may elect to use Contractor's quality plan in lieu of submitting the Quality Plan. If Subcontractor so elects, Subcontractor shall advise Contractor of this decision prior to beginning work

and shall perform all quality assurance/quality control checks utilizing the Contractor's quality plan and procedures to ensure that the Services performed under this Agreement fully conform to all contract requirements and industry standards. Use of the Contractor's quality plan and procedures by the Subcontractor shall not relieve the Subcontractor of its responsibility to implement such Quality Plan; nor shall it relieve the Subcontractor of its sole responsibility for the quality, technical accuracy, and the coordination of all designs, drawings, specifications, and other services furnished by the Subcontractor. The Subcontractor shall maintain complete records of all quality assurance and quality control verifications performed and those records shall be made available to the Contractor and Client for inspection as may be periodically requested.

SP 3. Access to Property - Unless agreed to otherwise herein, the Subcontractor shall be responsible for arranging with property owners access to any property necessary for the performance of the Services. The Subcontractor shall obtain all necessary permits from local authorities (if required) prior to commencing any Services.

SP 4. Health and Safety - Subcontractor and each of Subcontractor's lower tier subcontractors shall establish and implement a safety program that complies with all applicable provisions of federal, state, and municipal health and safety laws, including, but not limited to, appropriate record keeping and training requirements, for the purpose of preventing accidents and injuries to persons on, about, or adjacent to the Work Site. Subcontractor shall erect and properly maintain, as required by the conditions and progress of the Services, necessary safeguards for the protection of workers and the public.

Subcontractor shall abide by and enforce Contractor's and Owner's fire and safety rules and regulations that are in force at the work site. Subcontractor shall fully acquaint itself with these rules and regulations before starting the Services. Contractor may require Subcontractor to remove from the work site any of Subcontractor's employees or lower-tier subcontractors for committing a serious safety violation.

SP4.1 Safety Representative

Subcontractor shall designate a qualified and experienced safety representative at the Work Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and safety programs.

SP 4 2Laws and Regulations

Subcontractor, its employees, representatives, and lower-tier subcontractors shall comply with all applicable federal, state, and local laws, ordinances, statutes, rules, and regulations, relating to safety and health, including but not limited to, the Occupational Safety and Health Act of 1970 and The Construction Safety Act.

SP 4.3 Hazardous Materials Compliance

Subcontractor will submit to Contractor for review and approval, a Material Safety Data Sheet (Department of Labor Form OSHA-20), as prescribed in Title 29, Code of Federal Regulations, Part 1910.1200 for all hazardous materials that will be provided by Subcontractor and its lower tier subcontractors, at least two (2) days before delivery, or planned use of the material at the Work Site whether or not such material(s) is listed in Subpart Z (Toxic and Hazardous Substances). Subcontractor shall be responsible for coordinating the exchange or delivery of Material Safety Data Sheets or other hazard communication information, for which it is responsible and that is required to be made available to, or exchanged between or among, employers at the Work Site, in accordance with applicable law.

SP 4.4 Work Rules and Site Security

Subcontractor shall comply with and enforce applicable job work rules and any Site security system requirements.

SP 4.5 Safety Clean up and Removal of Debris and Waste Materials

At all times during the progress of the Services, Subcontractor shall keep its work area(s), including exit ways, rights-of-way, streets, and all other grounds and areas occupied by Subcontractor, clear of all refuse resulting from Subcontractor's operations.

Upon completion of the Services and before requesting Final Acceptance of the Services, Subcontractor shall perform the following: final cleaning of all rights-of-way, streets, borrow pits, and all other grounds occupied by Subcontractor in connection with the Services; removal of all refuse, excess materials, temporary structures, tools and equipment; and shall clean all parts of the Work, including, but not limited to windows, walls, ceilings, floors, fixtures, cabinet work and equipment as are applicable to the Services being performed hereunder, in a manner so that the finished Work is clean and safe and in a condition appropriate to the type of Work being performed .

SP 4.6 Submission of Safety Reports

Subcontractor will submit to Contractor monthly reports that include labor-hours worked during the prior period, the Total Recordable Incident Rate for injuries during the period, and the Days Away from Work Rate for Subcontractor's operations and those of its lower -tier subcontractors.

SP 5. Liquidated Damages

- A.** The Parties understand and agree the Client may suffer financial loss if the Services are not completed within the time periods specified in the Schedule set forth in Attachment B, plus any extensions thereof allowed in accordance with this Agreement.
- B.** The Parties agree on the amounts set forth in Paragraph E as Liquidated Damages incurred by the Client for delay, and not as a penalty.
- C.** Liquidated Damages arising hereunder from delays in meeting the schedule shall be measured as provided in the Prime Contract.

- D. Subcontractor shall be liable to Contractor for liquidated damages as may arise from delays beyond the Scheduled Completion Date, but only those delays caused by the sole fault of Subcontractor, or Subcontractor's employees, its subcontractors, agents or others, the acts, errors or omissions of which are attributed to Subcontractor. In assessing responsibility for the cause of any Subcontractor's delay, factual evidence, including the Project Milestone Schedule, project and work logs and other such recorded information will be used as described here. It is understood and agreed that Subcontractor shall only be responsible for the payment of liquidated damages to Contractor as set forth above, if Client assesses and collects such liquidated damages from Contractor (whether as a direct payment, offset, claim reduction or otherwise).
- E. Liquidated damages applicable to this Agreement shall be those amounts set forth in the Prime Contract.
- F. In no event shall the total liquidated damages paid by the Subcontractor to the Contractor pursuant to this SP5 exceed \$25,000,000.

SP 6. Other Damages for Delay

A. The parties understand and agree they may suffer costs or damages other than or in addition to the liquidated damages which may be assessed by the Client if either party fails to complete its work within the time periods specified in the Schedule set forth in Attachment B.

B. In the event of any such delay, nothing herein shall preclude a party from seeking an equitable adjustment in the contract price and/or schedule in accordance with the provisions of GC 15.

SP 7 Proprietary and Confidential Information

A. Each party agrees that all designs, drawings, inventions, know-how, processes, procedures, ideas and all other business, technical and financial information it obtains from the other are the confidential and proprietary property ("Confidential Information") of the disclosing party.

B. Confidential Information must be marked with a restrictive legend by the disclosing party. Confidential Information not marked with such legend or disclosed orally must be identified as proprietary or confidential at the time of disclosure, and the disclosing party must within fourteen (14) calendar days provide the receiving party with a written summary of the Confidential Information disclosed. During the above stated fourteen (14) calendar day period such Confidential Information shall be protected in accordance with the terms of this Agreement. Otherwise, the receiving party shall have no obligation of confidentiality based on the oral or unmarked disclosure after the above-stated fourteen (14) calendar day period.

C. Except as expressly and unambiguously allowed herein, Subcontractor and Contractor each agree that they will (i) hold in strictest confidence any Confidential Information that is disclosed

pursuant to the terms of this Agreement; (ii) restrict disclosure of such information to those employees who have a bona fide need to know; and (iii) use such information only for the purpose of satisfying its obligations under this Agreement. Neither party shall assign, license, sublicense, market, transfer, loan, adapt, duplicate or copy, directly or indirectly, all or any part of the Confidential Information disclosed to it, except such duplication or copying as may be necessary in connection with this Agreement, without the prior written consent of the other party.

D. In the event it is necessary for Contractor to disclose Subcontractor Confidential Information to any other subcontractor or to any consultant or other third party in order to meet its obligations under this Agreement or the Prime Contract, Contractor shall advise Subcontractor in advance of the need for such disclosure and shall ensure that any such disclosure shall be subject to a confidentiality obligation. Before disclosing Subcontractor Confidential Information, Contractor shall provide Subcontractor with a copy of the non-disclosure agreement duly executed by the intended recipient.

E. In the event Contractor is required to include Subcontractor Confidential Information in any submission to the Client or the FRA in connection with the Prime Contract, including but not limited to the PTC Development Plan and the PTC Safety Plan, Contractor shall clearly and prominently in bold type note that said document contains confidential information and shall include in the transmittal of such document a request that the document be treated as confidential and exempt from public disclosure. Contractor shall afford Subcontractor the opportunity to review and redact any such documents before submittal to the Client or the FRA and such redacted version shall be transmitted along with the request to exempt the confidential information from public disclosure.

F. The obligations of a party hereunder in respect of the non-disclosure and limited use of Confidential Information provided by the other Party shall not apply to information that (i) is in the possession of the receiving Party at the time it receives the information, (ii) comes into the possession of the receiving Party in a manner that is not subject to any obligation of confidentiality, (iii) is generally known to the public, (iv) is developed by the receiving Party independently and without reference to the Confidential Information or (v) the receiving Party reasonably believes on advice of counsel it is legally obligated to disclose by law, legal regulation or court order, provided, however, that in such case, unless legally prohibited from doing so, the receiving Party shall immediately inform the disclosing Party of the obligation to disclose in time sufficient for the disclosing Party to take such legal action as it deems necessary or appropriate to prevent such disclosure.

ATTACHMENT "F"
PRIME CONTRACT

The terms and conditions of the Prime Contract, New Jersey Transit Corporation, Design, Furnish, Construct, Test and Commission, ASES II Positive Train Control Project No. 10-099X, as set forth in Attachment F-1, inclusive of all referenced technical requirements, commercial provisions and addenda, are incorporated into this Agreement as applicable to Subcontractor's Scope of Services as provided in General Conditions GC 18.

For the purposes of this Agreement, the term "Contractors Technical Proposal" as used in Prime Contract Article 32, Contract Documents and Sequence of Precedence, shall mean Contractor's Technical Proposal dated July 25, 2011, attached hereto as Attachment F-2.